

Fig 1

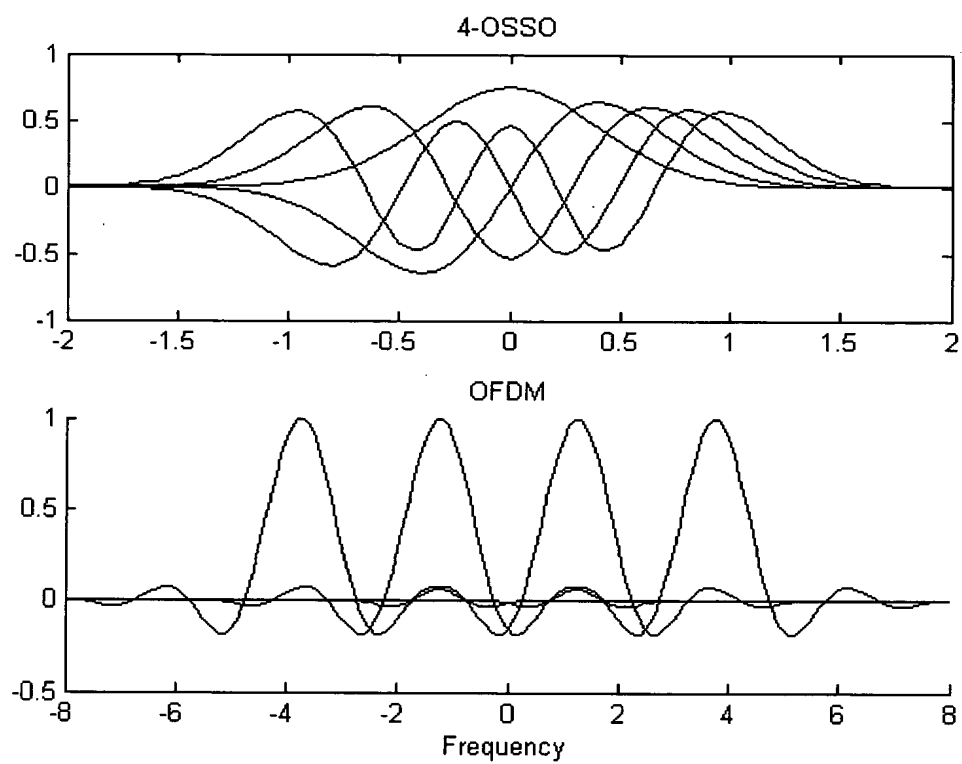


Fig 2

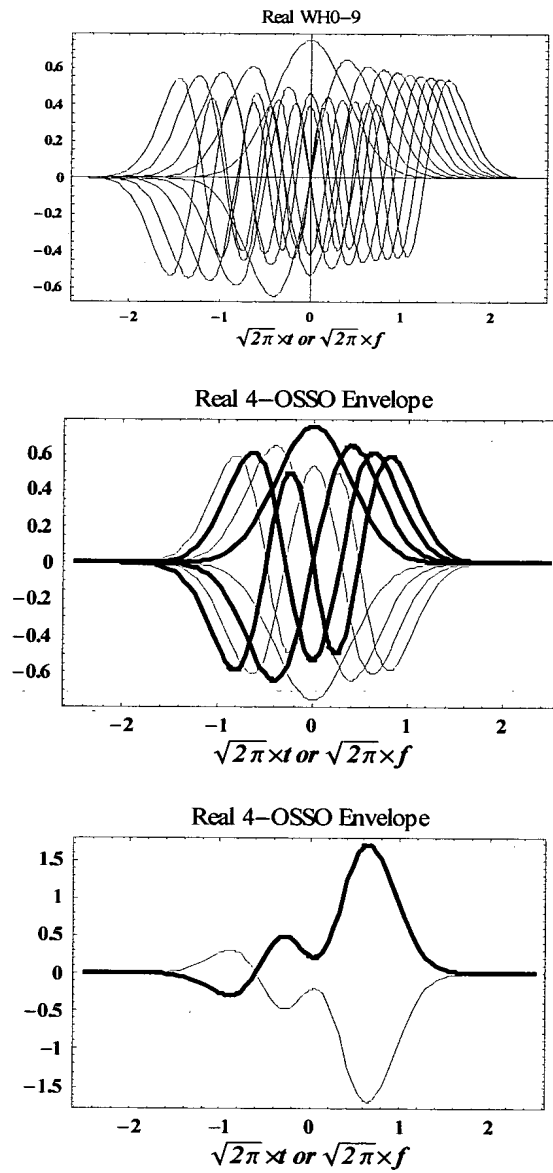


Fig 3

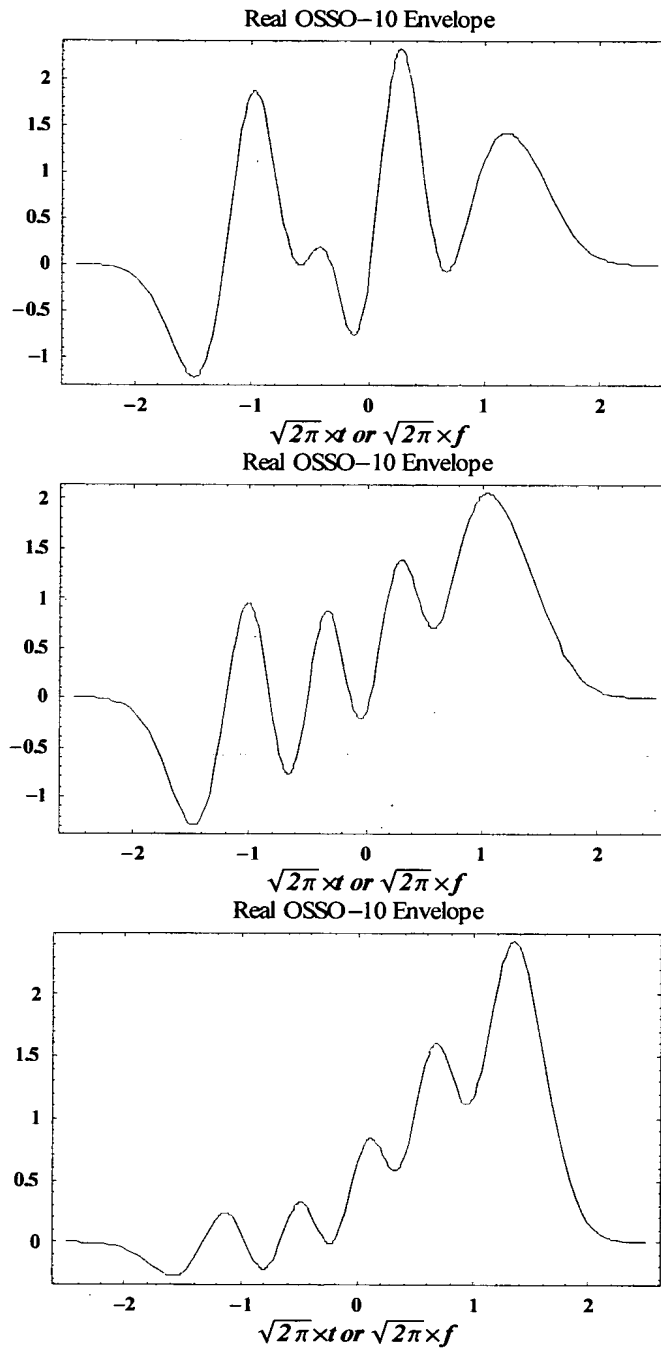


Fig 4

0000 ●	0001 ●	0011 ●	0010 ●
1000 ●	1001 ●	1011 ●	1010 ●
1100 ●	1101 ●	1111 ●	1110 ●
0100 ●	0101 ●	0111 ●	0110 ●

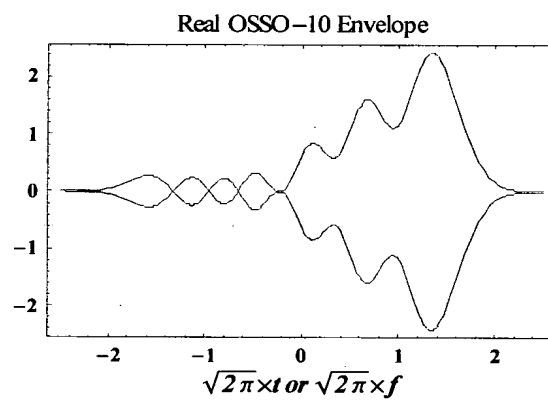


Fig 5

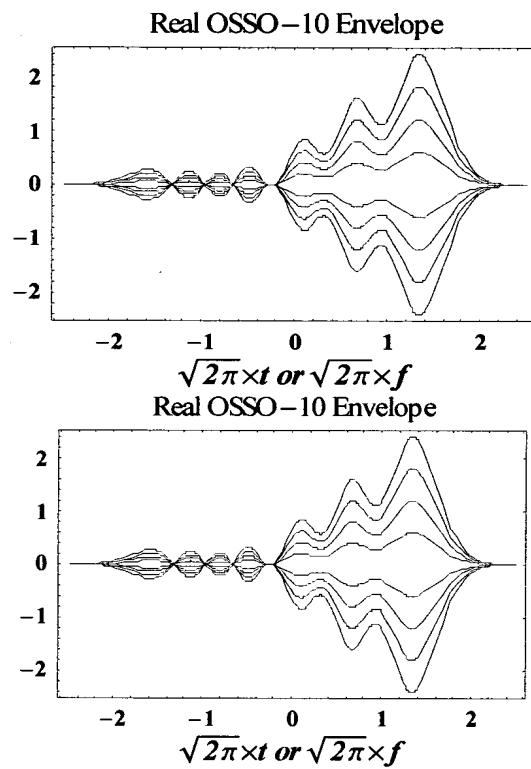


Fig 6

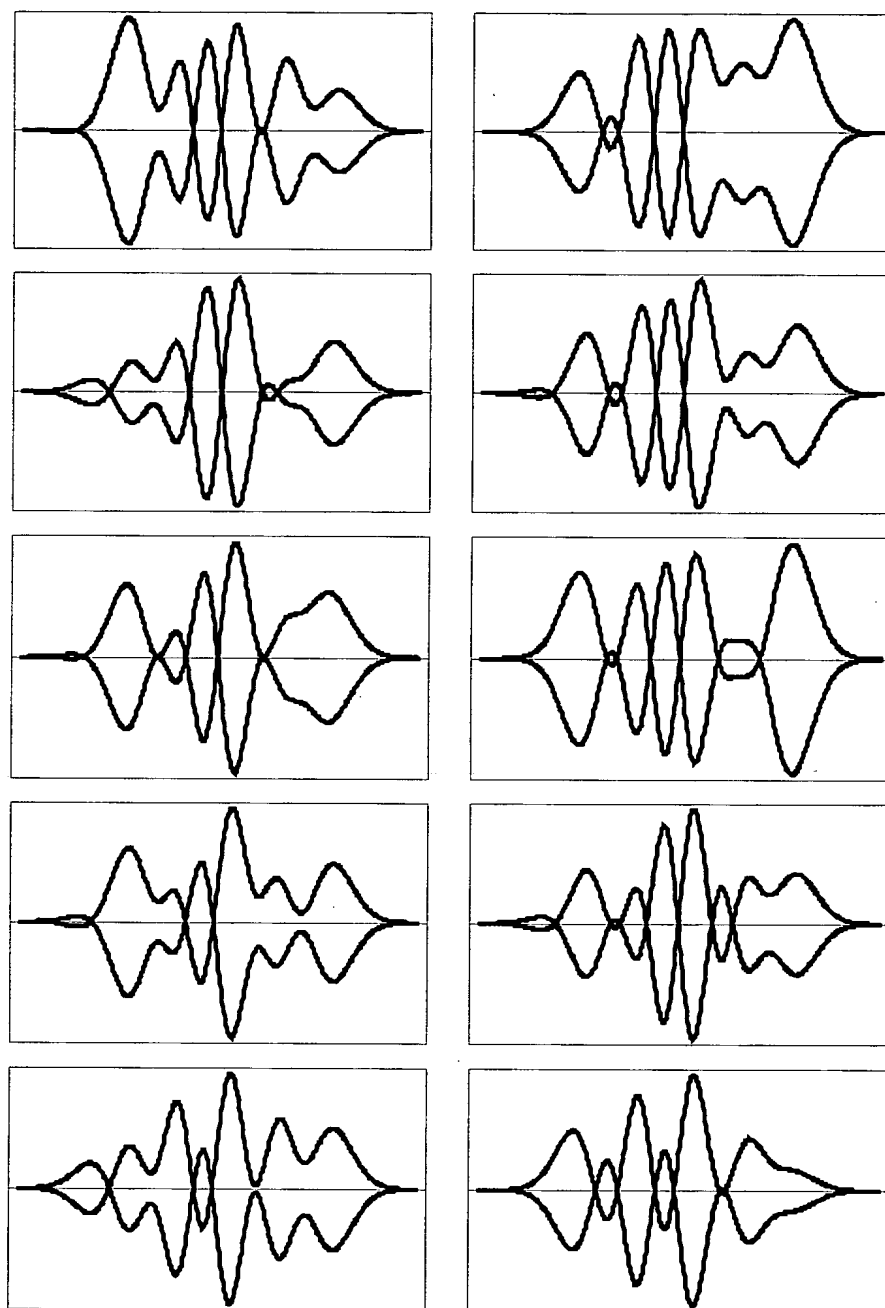


Fig 7

### CROSS-CORRELATIONS: TIME DOMAIN

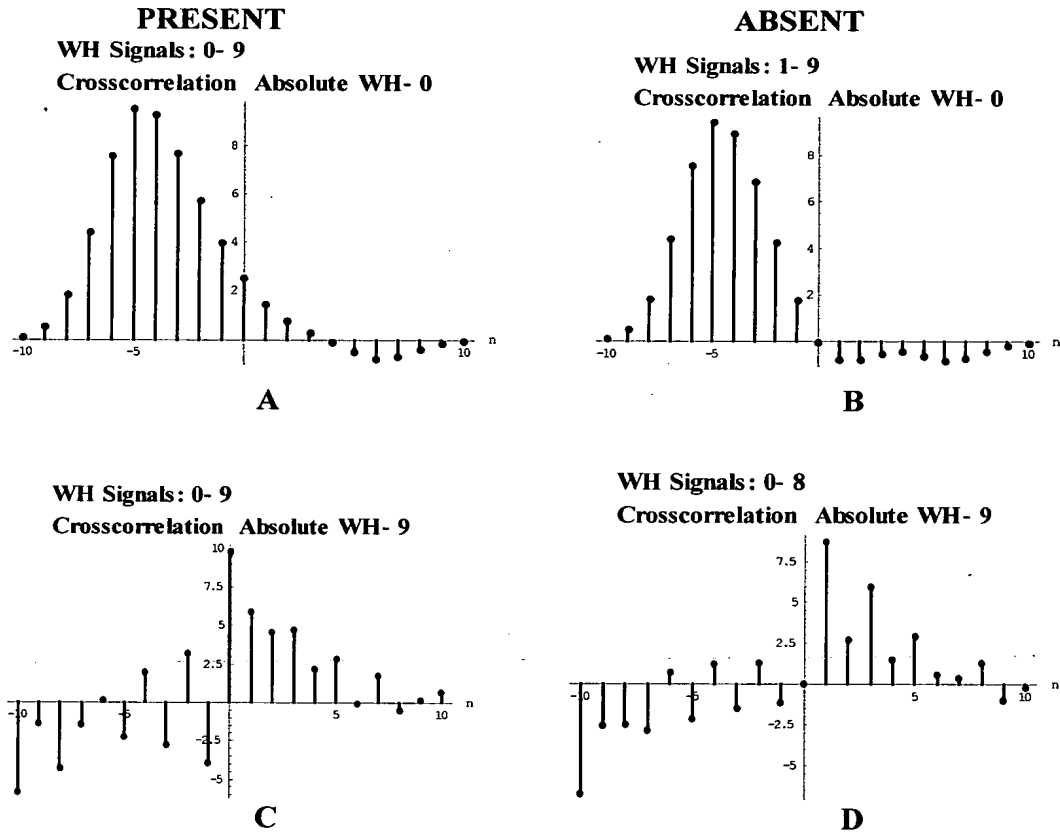


Fig 8A



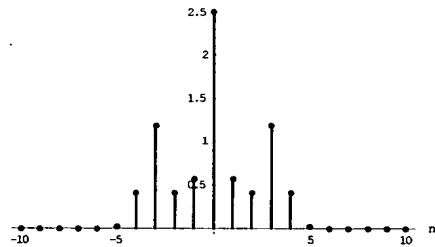
# CROSS-CORRELATIONS: FREQUENCY DOMAIN

## PRESENT

Frequency Domain

WH Signals: 0- 9

Crosscorrelation Absolute WH- 0



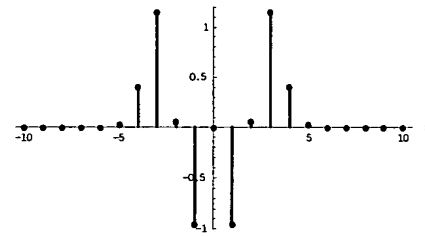
A

## ABSENT

Frequency Domain

WH Signals : 1- 9

Crosscorrelation Absolute WH- 0

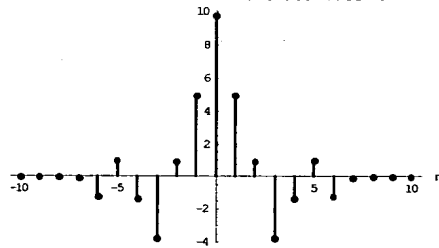


B

Frequency Domain

WH Signals: 0- 9

Crosscorrelation Absolute WH- 9

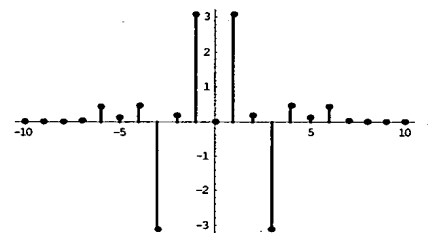


C

Frequency Domain

WH Signals : 0- 8

Crosscorrelation Absolute WH- 9



D

Fig 8B

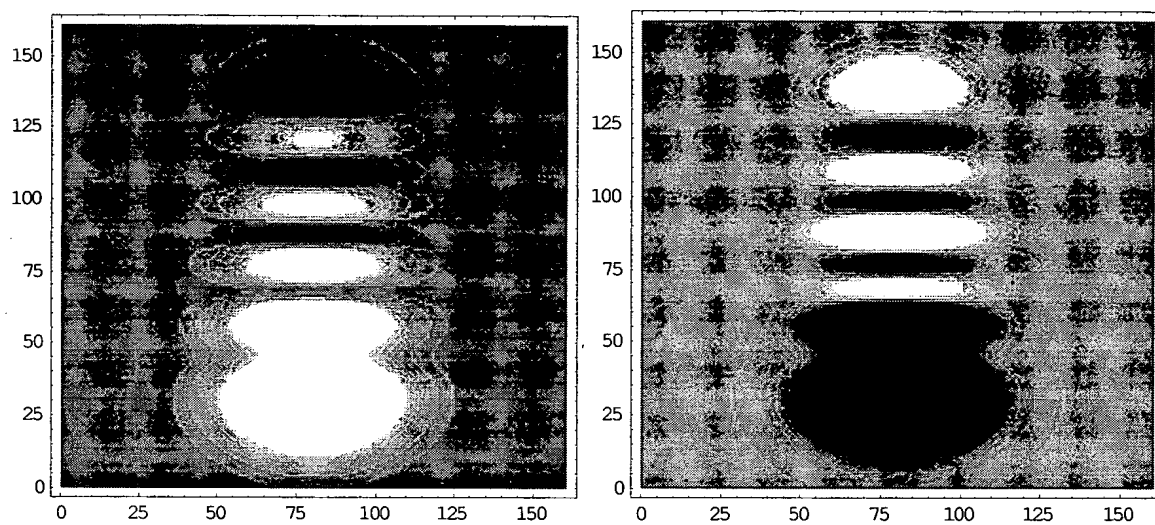


Fig 9A

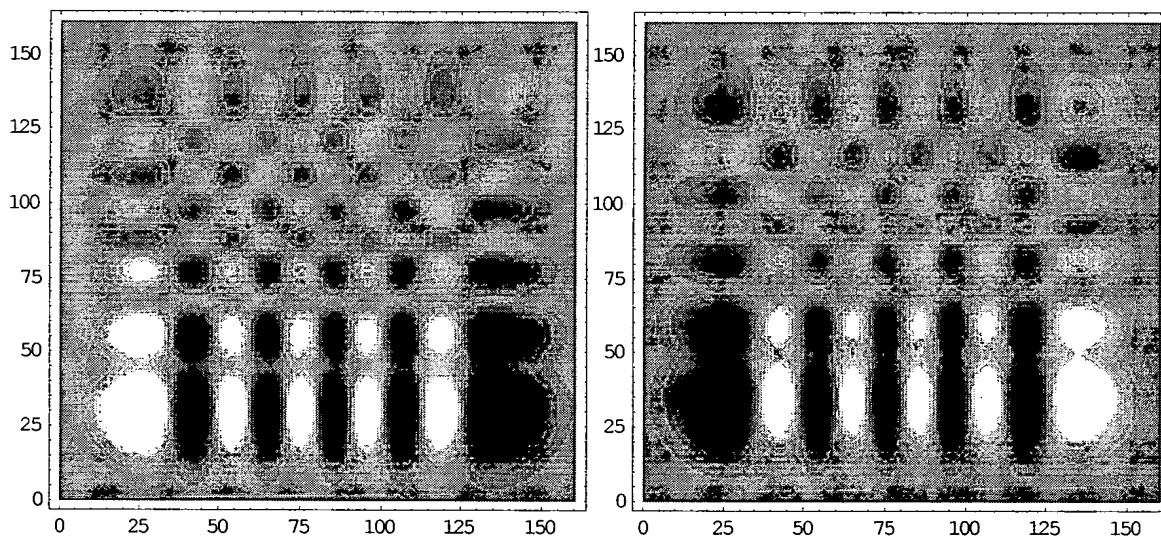


Fig 9B

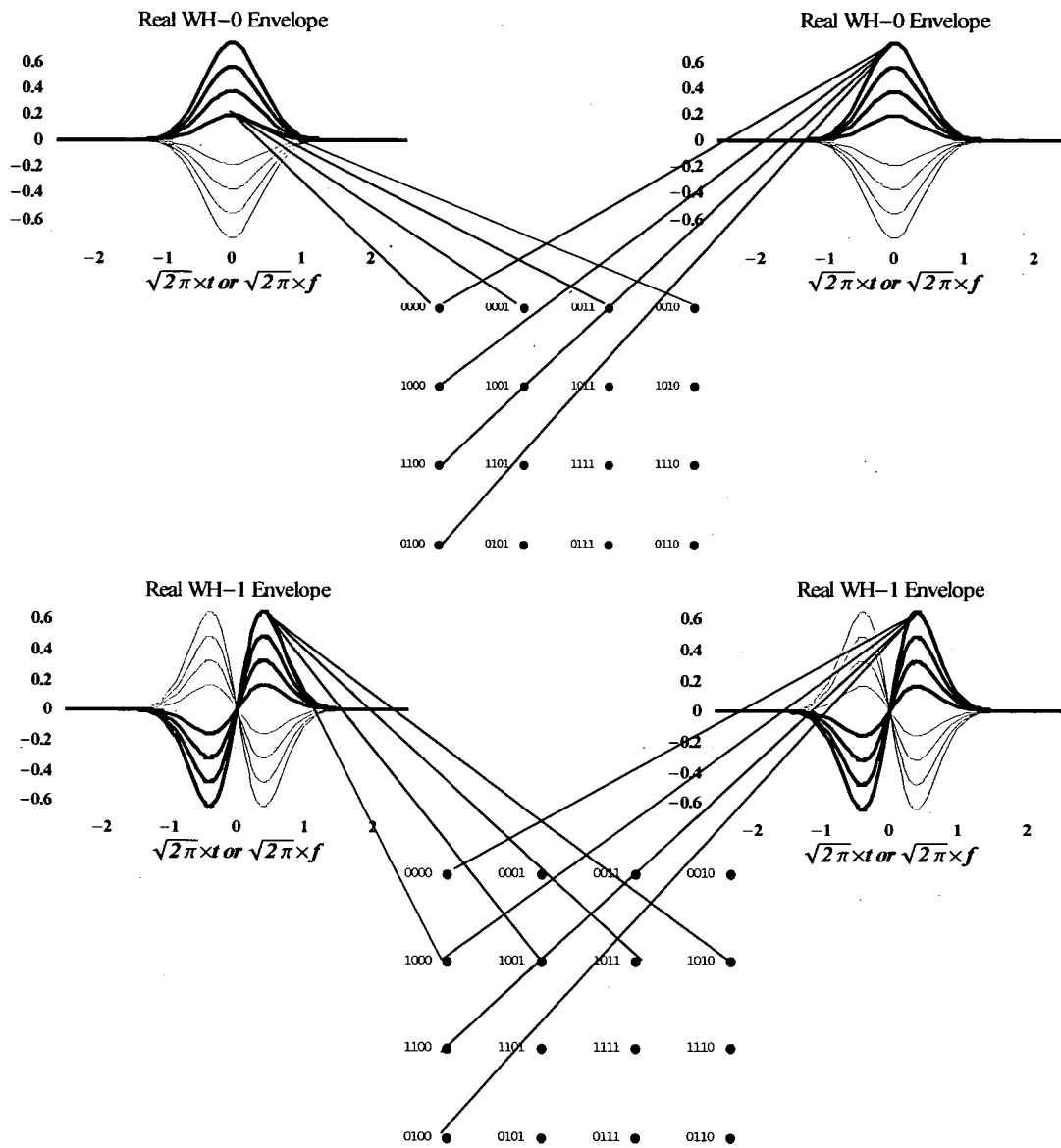


Fig 10A

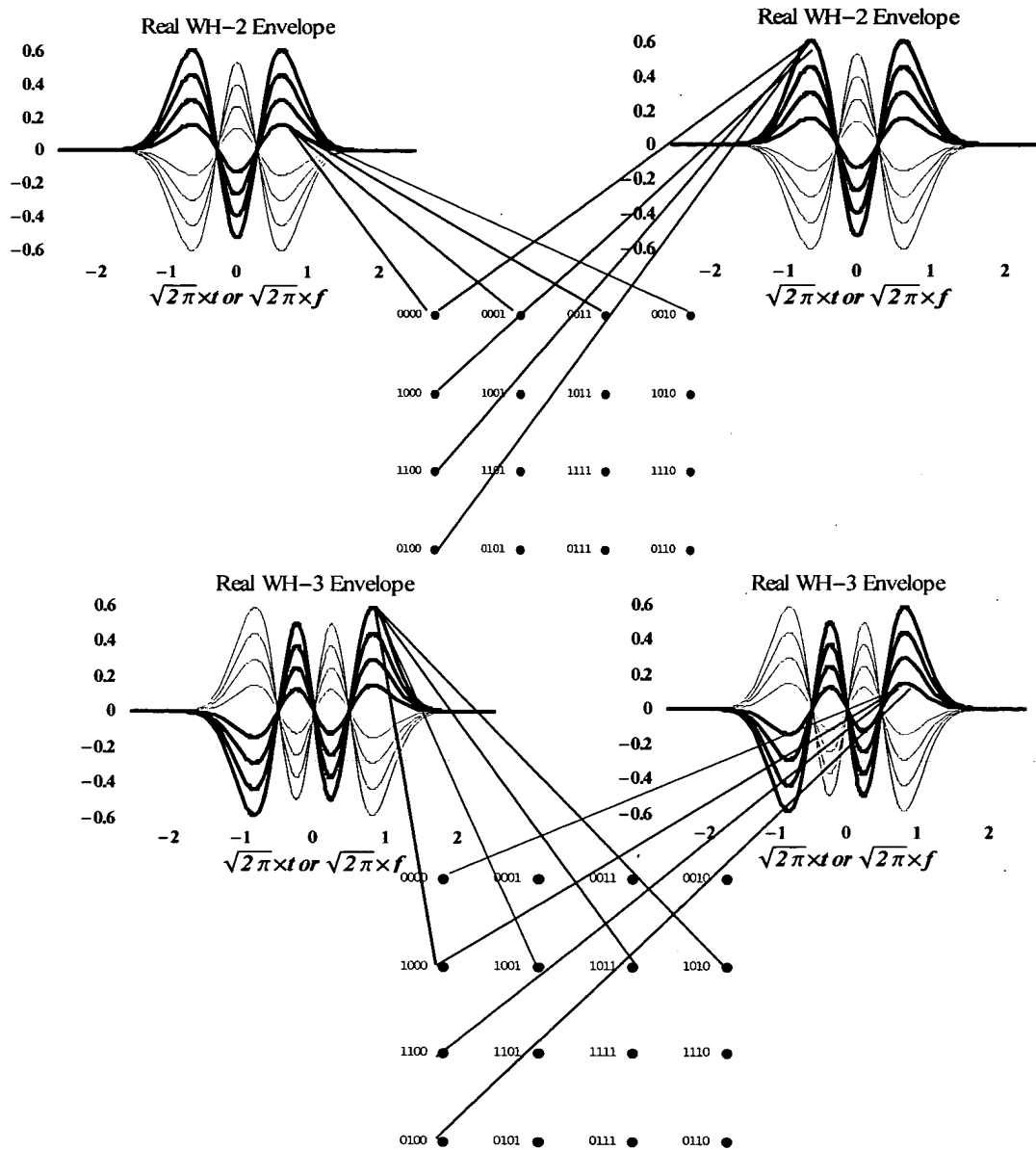


Fig 10B

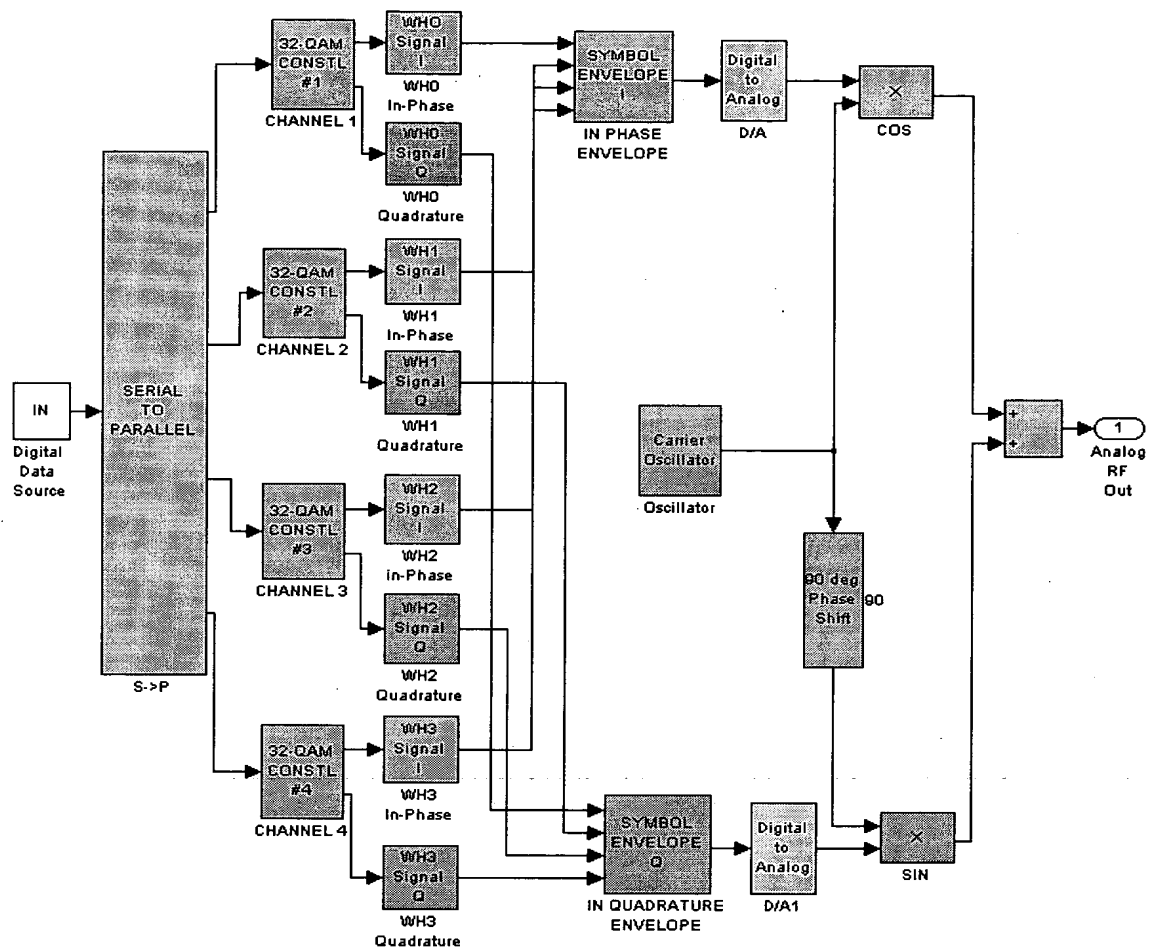


Fig 11A

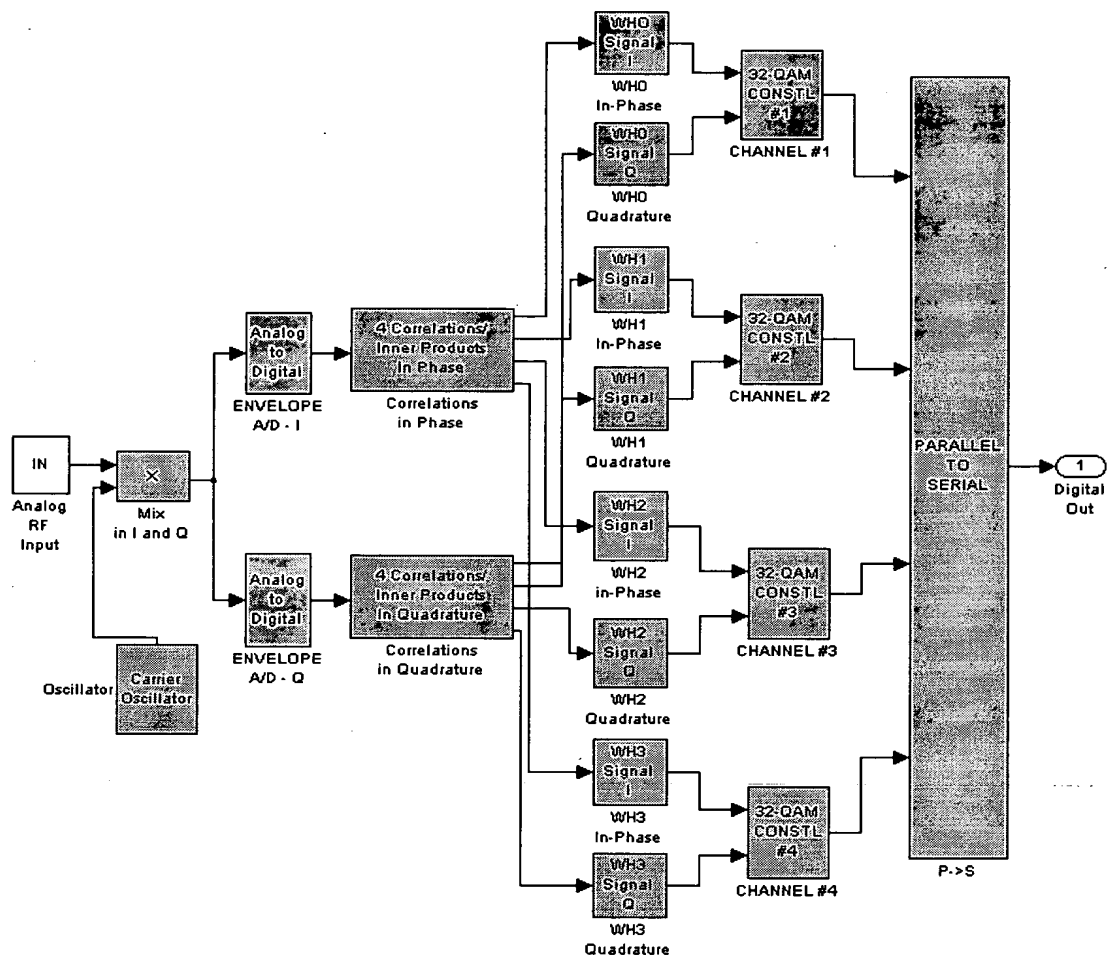
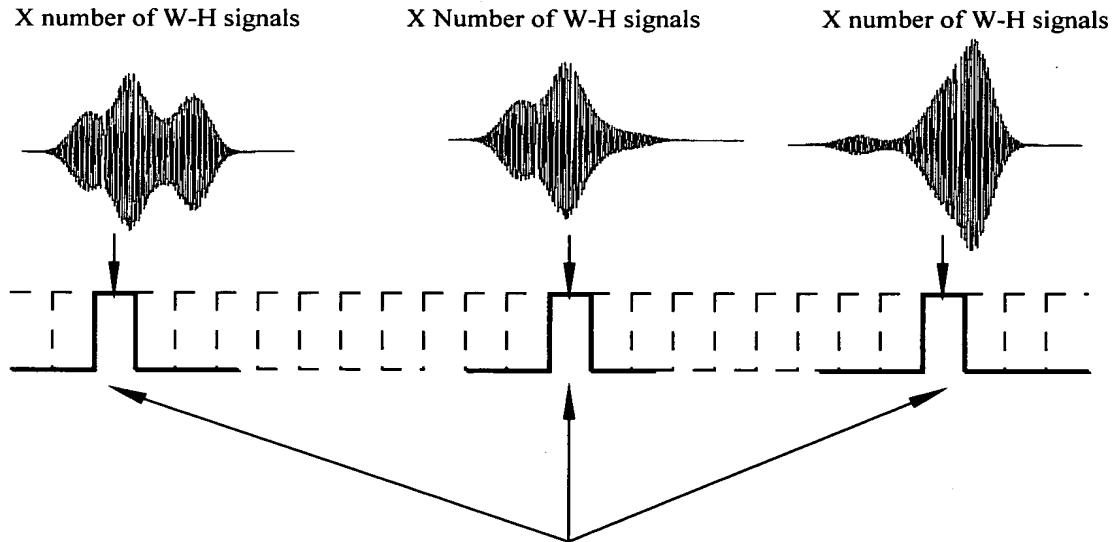


Fig 11B

## ANALOG: Orthogonal Signal Spectral Overlay (OSSO)

Data encoding by AM or QAM constellations



Temporal positioning by orthogonal codes

DIGITAL: Orthogonal Code Schemes (OCS)

Both TDMA and CDMA possible

Fig 12